



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,864	07/14/2003	Hiroshi Shigetaka	9281/4602	6963

7590 08/22/2007  
Brinks Hofer Gilson & Lione  
P. O. Box 10395  
Chicago, IL 60610

EXAMINER
----------

HOLTON, STEVEN E

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

08/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/618,864	SHIGETAKA, HIROSHI	
	Examiner	Art Unit	
	Steven E. Holton	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is made in response to applicant's amendment filed on 7/5/2007. Claims 1-3 and 8-12 are currently pending in the application. An action follows below:

#### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities: a minor misspelling on line 12 of the amendment in the newly amended portion. The word 'being' is misspelled as 'bieng'. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3 and 8-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amendments to claims 1 and 8 recite the "input operation is conducted by performing a bonding operation along the obverse surface of the curve portion". The Examiner notes that there is no teaching within the specification discussing a 'bonding operation' that is an input operation of the device.

The specification does discuss the bonding of the top substrate of the device (Fig. 6, element 10) to the reverse surface of the support plate (Fig. 3, the underside of area 4A, and Fig. 5, bonding tape, element 6, is shown between the surface, element 4, and the input device, element 2). The Examiner is unclear how a finger touching the obverse surface of the housing would create a 'bonding operation'. The input sensor is bonded to the housing surface by a bonding agent. The pressure of the finger creates an electrostatic force that is measured by the electrodes of the input device. No 'bonding operation' takes place; merely a conversion of the finger touch to an electrical signal. Therefore, it is unclear what is meant by a 'bonding operation' as named in the newly amended claims and the 'bonding operation' is found as being new matter.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "the other surface of the flexible substrate of the electrostatic-capacitance-type input sensor is bonded to the reverse surface of a curved portion". It is unclear what object has a curved portion that is bonded to the flexible substrate. It is understood from the specification that the curved portion is being made in reference to the housing body discussed in the specification. However, it is improper read the details of the specification into the claim in this case. The Examiner also notes that a 'insulating support plate' was removed from the claim language with

the most recent amendment. It is likely that the curved portion is intended to reference a curved portion of the 'insulating support plate', but that is impossible based on the current amendment.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-3 and 9-12 have been considered but are moot in view of the new ground(s) of rejection based on the amendments to the claims. The Examiner notes that assuming the 'bonding operation' was not a new matter issue the disclosed invention would still be rejected under the combination of Gerpheide et al. (USPN: 6680731) in view of Gerpheide (USPN: 5861875) as provided in the previous Office Action. Gerpheide et al. discloses a touch input device with flexible substrates (Fig. 10A, element 80) with an extension section (Fig. 10A, element 84) connected to a non-flexible PC board (Fig. 10A, element 82). Gerpheide et al. further discusses bonding the input device to the reverse side of a keyboard case (col. 4, lines 8-12). Gerpheide discloses the specific X and Y electrode arrangements connected to substrates (Fig. 8). As discussed in the previous Office Action, at the time of invention it would have been obvious to one skilled in the art to use a electrode arrangement of Gerpheide with the flexible substrate touch sensor of Gerpheide et al. to produce an electrostatic-capacitance-type touch sensor formed on flexible substrates and bonded to the reverse side of a housing so that the touch sensor would not be visible from the outside of the housing while operating the touch sensor.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton  
Division 2629  
August 7, 2007

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER  
